

1. Remarks upon the Habits and Change of Plumage of Humboldt's Penguin. By A. D. BARTLETT, Superintendent of the Society's Gardens.

[Received November 13, 1878.]

On the 24th of January, 1878, a specimen of Humboldt's Penguin (*Spheniscus humboldti*) was purchased from a dealer in Liverpool. The bird was in poor condition when received, and very dirty, but perfectly tame, following one about, and seeming pleased to be taken on the lap and nursed like an infant. At first it required to be fed by hand; for if its food was placed on the ground the bird took no notice of it, although hungry. After a few days, if living fishes were thrown to it and the bird saw them jumping about on the floor, it began to pick up the fishes and swallow them. From this and from the colour and condition of its plumage, I have no doubt that the bird had been reared from the nest, and had never previously fed itself.

It was some days before the Penguin ventured into the water; but after the first wash the bird rapidly improved: the feathers became clean; its appetite increased; and it passed much time in the water, evidently gaining strength and weight. About this time it frequently uttered its loud braying jackass-like notes, and became fat and in full vigour. Figure 1 (p. 7) gives a very faithful representation of the bird at this time. About the 22nd of February, the bird appeared dull, and with half-closed eyes moped about: it became ill-tempered and spiteful, bit at any one who offered to touch it, and avoided going into the water. The bird looked larger than before, its feathers standing out from its body during this condition; but its appetite continued good, and it fed as freely as usual.

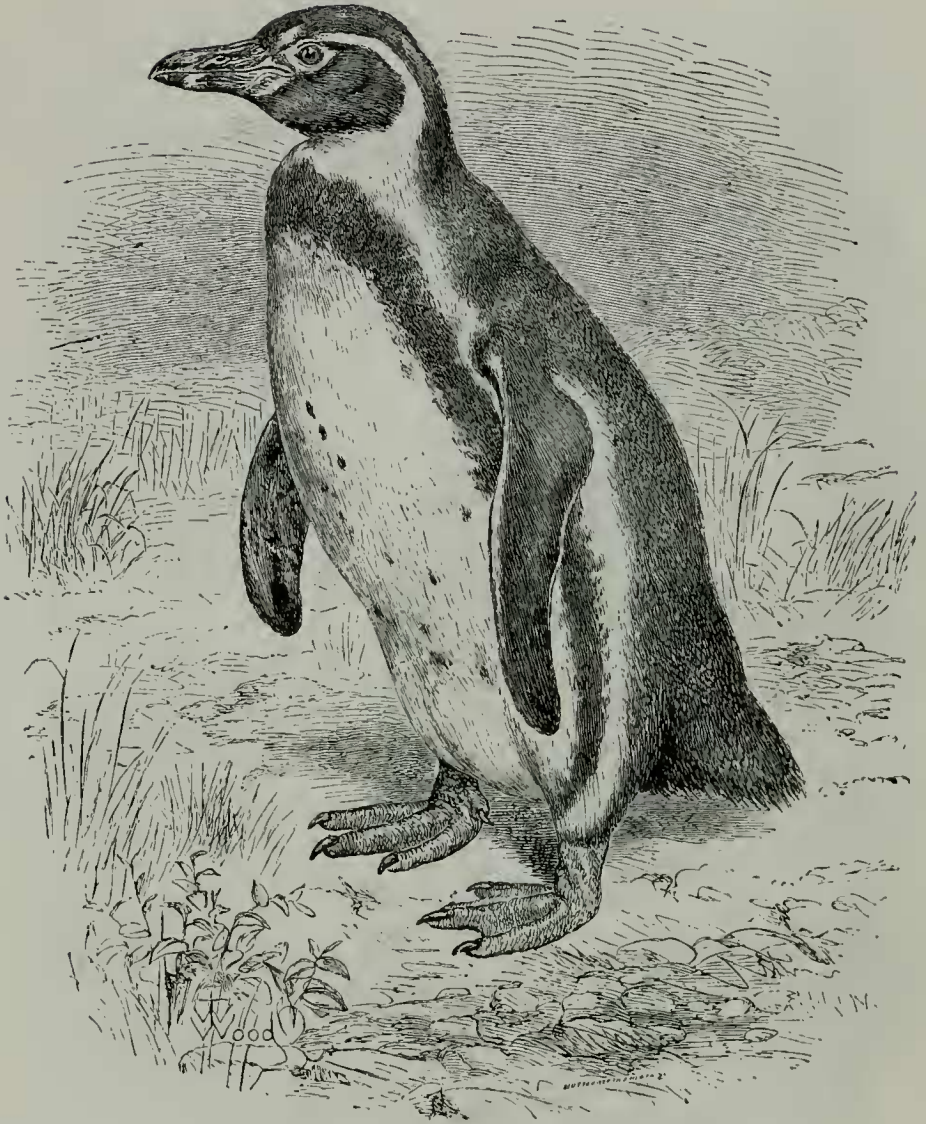
In a few days the feathers began to fall off from all parts of the bird, not, as birds usually moult, a few feathers at a time, but in large quantities: for instance, the bird generally remained stationary during the night, and in the morning there was left round it a circle of cast feathers that had been shed during the night. So rapidly did the process of moulting go on, that by the 7th of March the bird had entirely renewed its plumage, and appeared in the adult dress, as represented in figure 2 (p. 8). The manner in which the flipper-like wings cast off the short scale-like feathers was remarkable: they flaked off like the shedding of the skin of a serpent; the new feathers being already plainly visible, the old feathers were pushed off by the new ones; this was very clearly noticeable, as many of the old feathers could be seen still attached to the tips of the new feathers, so that the bird was entirely covered with its new plumage before the old feathers dropped off. The bird had by these means entirely changed its dress and appearance in certainly less than ten days. It looked thinner on account of the shortness of its new feathers, and doubtless from a decrease in bulk, consequent upon the rapid deve-

Fig. 1.



*Spheniscus humboldti* (before moult).

Fig. 2.

*Spheniscus humboldti* (after moult).

lopement of the entire plumage. The bird avoided the water for a few days before it began to moult, and also after it had renewed its feathers; it soon, however, became lively, its eyes assumed their usual form and brightness, it took freely to the water, in which it passed the greater part of the day. Its movements in the water when swimming, diving, and pursuing fish were most extraordinary; it seemed, as it were, to fly under water, using its flipper-like wings after the fashion of a Seal.

The Penguin appears so much at home in the water, so perfectly adapted to an aquatic life, that one would conclude that, but for the necessity of breeding and moulting, this bird would be far more at home on the ocean than in passing even a short period on land, being so ill-adapted in form for travelling on shore.

2. On a Collection of Birds made by Mr. Hübner on Duke-of-York Island and New Britain. By OTTO FINSCH, Ph.D. C.M.Z.S.

[Received November 20, 1878.]

From the Museum Godeffroy at Hamburg I have received a collection of the birds of Duke-of-York Island and the adjoining parts of New Britain, sent over by Mr. Hübner. Although through the zealous efforts of the Rev. George Brown, we are pretty well acquainted with the fauna of Duke-of-York Island, especially with its ornithology, on which Dr. Sclater has published some valuable papers, I think the following paper will form a not uninteresting contribution to our knowledge.

The present collection contains 52 species from Duke-of-York Island, and 7 from New Britain, 14 being new to the former group, namely *Haliaëtus leucogaster*, *Hirundo javanica*, *Cuculus canorus*, *Scythrops novæ-hollandiæ*, *Macropygia doreya*, *Strepsilas interpres*, *Esacus magnirostris*, *Sterna bergii*, *St. longipennis*, *Procellaria neglecta*, *Pr. leucoptera*, *Puffinus leucomelas*, *P. tenuirostris*, and *Dysporus sula*.

Except the native names, Mr. Hübner has given me no notices; I therefore can only copy these, reminding you that the pronunciation of them is according to the German language.

*From Duke-of-York Island.*

1. PANDION LEUCOCEPHALUS, Gould.

*P. haliaëtus*, Scl. Proc. Zool. Soc. 1877, p. 108.

Native name *Teringau*, Hübner.

Male and female of this apparently constantly smaller species or race of our common Osprey.

1 "On the Birds collected by Mr. George Brown on the Duke-of-York Island, and on the adjoining parts of New Ireland and New Britain," P. Z. S. 1877, pp. 96-114; on a second collection, ib. 1878 p. 289; and on a third, ib., p. 670.